APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,121	02/18/2004	Floyd Backes	160-031	1979

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EXAMINER
PHILPOTT, JUSTIN M

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/781,121	BACKES ET AL.
	Examiner	Art Unit	
	Justin M. Philpott	2616	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _18 May 2006_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-11_ is/are pending in the application.

   4a) Of the above claim(s) _6-10_ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-5 and 11_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some * c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on May 2, 2006 has been entered.

Response to Arguments

2.   Applicant's arguments filed May 2, 2006 have been fully considered but they are not

persuasive.

Specifically, applicant argues that the cited prior art does not teach the new limitations

recited in amended claim 1 and/or new claim 11. However, applicant's argument is not

persuasive because the previously cited art of English teaches these new limitations as discussed

in the following office action. Additionally, as discussed below, these limitations are not

enabled by applications specification. Thus, even if the prior art did not teach these claim

limitations, applicant's claims would remain rejected for lack of enablement as discussed below.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4.　　　Claims 1-5 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the enablement requirement. The claim(s) contains subject matter which was not described

in the specification in such a way as to enable one skilled in the art to which it pertains, or with

which it is most nearly connected, to make and/or use the invention.

Regarding claim 1, the limitation of "ascertaining logic utilizing, at least in-part, ...

technology type employed by the current and alternative access points" is not described in the

specification in such a way as to enable one skilled in the art to which it pertains, or with which

it is most nearly connected, to make and/or use the invention. In Remarks filed May 2, 2006,

applicant asserts this claim language is enabled by pages 53-54 of the originally filed

specification. However, the Examiner has found that the most closely related portion to such a

limitation in pages 53-54 of the specification is "default load_factors are derived from ... a

default 'average data rate' per technology" (page 54, lines 13-15). The "type" of technology is

not discussed, either implicitly or explicitly, in pages 53-54 or the remainder of the specification.

Further, "ascertaining logic utilizing, at least in-part, ... technology type" is also *not* discussed,

either implicitly or explicitly, in pages 53-54 or the remainder of the specification. The

specification focuses on "average data rate", not "technology type" recited in claim 1.

Accordingly, claim 1 fails to comply with the enablement requirement.

Claims 2-5 and 11 depend upon claim 1, and therefore are rejected for the same reason

discussed above regarding claim 1.

Additionally, regarding claim 11, the limitation "ascertaining logic also employs

maximum potential signal strength of the alternative access points" is not described in the

specification in such a way as to enable one skilled in the art to which it pertains, or with which

it is most nearly connected, to make and/or use the invention. In Remarks filed May 2, 2006,

applicant asserts this claim language is enabled by page 49 of the originally filed specification.

However, Examiner has found that the most closely related portion to such a limitation in page

49 of the specification, or the remainder of the specification, is the listing of "Max Power"

among data stored in a table. The mention of including "Max Power" in a table does *not* enable

the limitation of "ascertaining logic also employs maximum potential signal strength of the

alternative access points". Accordingly, for this additional reason, claim 11 fails to comply with

the enablement requirement.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 1-5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent Application Publication No. US 2003/0036374 by English et al. in view of U.S. Patent

No. 6,144,855 to Slovin.

Regarding claim 1, English teaches a program product for use by a wireless device (e.g.,

mobile node 902a, see FIGS. 9 and 10) in a wireless communications environment, the program

product comprising a computer readable medium having embodied therein a computer program

for storing data (e.g., see paragraph 0168 regarding position calculation, inherently comprising

such a program), the computer program comprising: logic for associating the wireless device

with a current access point on a first channel (e.g., see paragraph 0170, particularly lines 9-17

regarding mobile node 902a associating with one of access points 904a or 904b, inherently

comprising one or more respective channels within respective radio coverage areas 1012 and

1014; see also paragraphs 0076, 0100, 0141 and 0163 regarding channels); logic for ascertaining

by the wireless device whether the wireless device should attempt to associate with an alternative

access point operating on a second channel (e.g., see paragraph 0170, particularly lines 9-17

regarding mobile node 902a makes the decision of which access point 904a or 904b to associate

with), the ascertaining logic utilizing, at least in-part, technology type (e.g., see paragraph 0145

regarding "the present invention can be used with any type of ultra wideband technology, but is

especially suited for use with time-modulated ultra wideband technology", see also paragraphs

0149-0159 regarding "conventional radio technology") employed by the current and alternative

access points (e.g., see paragraphs 0164-0167 regarding the present invention using a technology

type that has the advantage of "notify[ing] the mobile node 902a when it is located near or within

overlapped area 1004 of radio coverage areas 1010 and 1012 managed by access points 904a and

904b" which is selected for providing continuous network connectivity instead of selecting

traditional roaming/conventional technology type); and logic for requesting association with the

alternative access point if it is ascertained that the wireless device should attempt to associate

with the alternative access point (e.g., see paragraph 0180 regarding the handoff of

communications to a new access point; see also generally paragraphs 0146-0181).

However, English may not specifically disclose the ascertaining is based at least in-part

on signal strengths of transmissions from the current and alternative access points.

Slovin, like English, also teaches an apparatus for use by a wireless device for associating

with access points (e.g., see col. 1, line 35 – col. 4, line 35), and specifically discloses the well

known teaching for ascertaining by a wireless device to be based at least in-part on signal

strengths of transmissions from a current and an alternative access point (e.g., see col. 9, lines 6-

24 regarding selecting the best access point according to the RSSI, and see col. 1, lines 62-63

clearly identifying the term of art RSSI as "radio signal strength intensity"). Additionally, the

teachings of Slovin provide an equalized ratio of available channels and demanded channels over

a plurality of stations and a plurality of access points, for overall improved operation (e.g., see

col. 1, lines 35-58 as well as col. 1, line 59 – col. 4, line 35). Thus, at the time of the invention,

not only was it well known in the art for ascertaining to be based at least in-part on signal

strengths of transmissions from a current and an alternative access point (e.g., see col. 9, lines 6-

24 regarding selecting the best access point according to the RSSI), it would further have been

obvious to one of ordinary skill in the art to associate access points as taught by Slovin in order

to provide an equalized ratio of available channels and demanded channels over a plurality of a

stations and a plurality of access points, for overall improved operation (e.g., see col. 1, lines 35-

58 as well as col. 1, line 59 – col. 4, line 35).

Regarding claim 2, English teaches logic for automatically collecting, by the wireless

device, information about access points operating on other channels (e.g., see paragraph 0178

regarding mobile node 902 being informed about information regarding access points 904a, 904b

and 904c; and also paragraphs 0076, 0100, 0141 and 0163 regarding channels).

Regarding claim 3, English teaches the logic for ascertaining ascertains that the wireless

device should attempt to associate with the alternative access point operating on the second

channel if the alternative access point on the second channel is closer than the current access

point (e.g., see paragraphs 0170-0180 regarding mobile node 902 determining which access

point to associate with based upon proximity to the access points).

Regarding claim 4, English teaches the ascertaining is by calculating a first biased

distance between the wireless device (e.g., mobile node 902) and the current access point based

on "x" samples (e.g., see paragraphs 0167-0168 and 0175 regarding the impulse radio unit 1016

within mobile node 902 triangulating the current position of the mobile node 902, inherently

comprising three or more samples); calculating a second biased distance between the wireless

device and the alternative access point operating on the second channel based on "y" samples

(e.g., see paragraphs 0175-0180 regarding mobile node 902 estimating such a distance by

comparing the current position of the mobile node 902 with a map generated in step 1104 of FIG.

11 which comprises the position of a different access point such as 904b or 904c) where "y"

(e.g., known position of mobile node 902 and known position of access point 904b) is less than

"x" (e.g., three of more samples for triangulating the current position of mobile node 902); and

ascertaining that the alternative access point operating on the second channel is closer than the

current access point if the second biased distance is less than the first biased distance (e.g., see

paragraphs 0164-0181, particularly paragraphs 0170 and 0175-0180 regarding mobile node 902

determining which access point to associate with).

Regarding claim 5, English teaches sending a message to the alternative access point

operating on the second channel (e.g., see paragraph 0171 regarding mobile node 902a deciding

to associate with a different access point and handing off communications to the different access

point after authenticating with the different access point).

Regarding claim 11, English teaches ascertaining logic also employs maximum potential signal strength of the alternative access point (e.g., see paragraph 0122 and FIG. 5I regarding signal strength having a maximum value; see also paragraphs 0170-0171 regarding identifying when the signal power is not at "standard levels" and preventing association with the access point until standard power levels are achieved, at a particular distance, thereby employing maximum potential signal strength of the alternative access point).

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571.272.3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/781,121

Art Unit: 2616

Justin M. Philpott